

FIG. 1

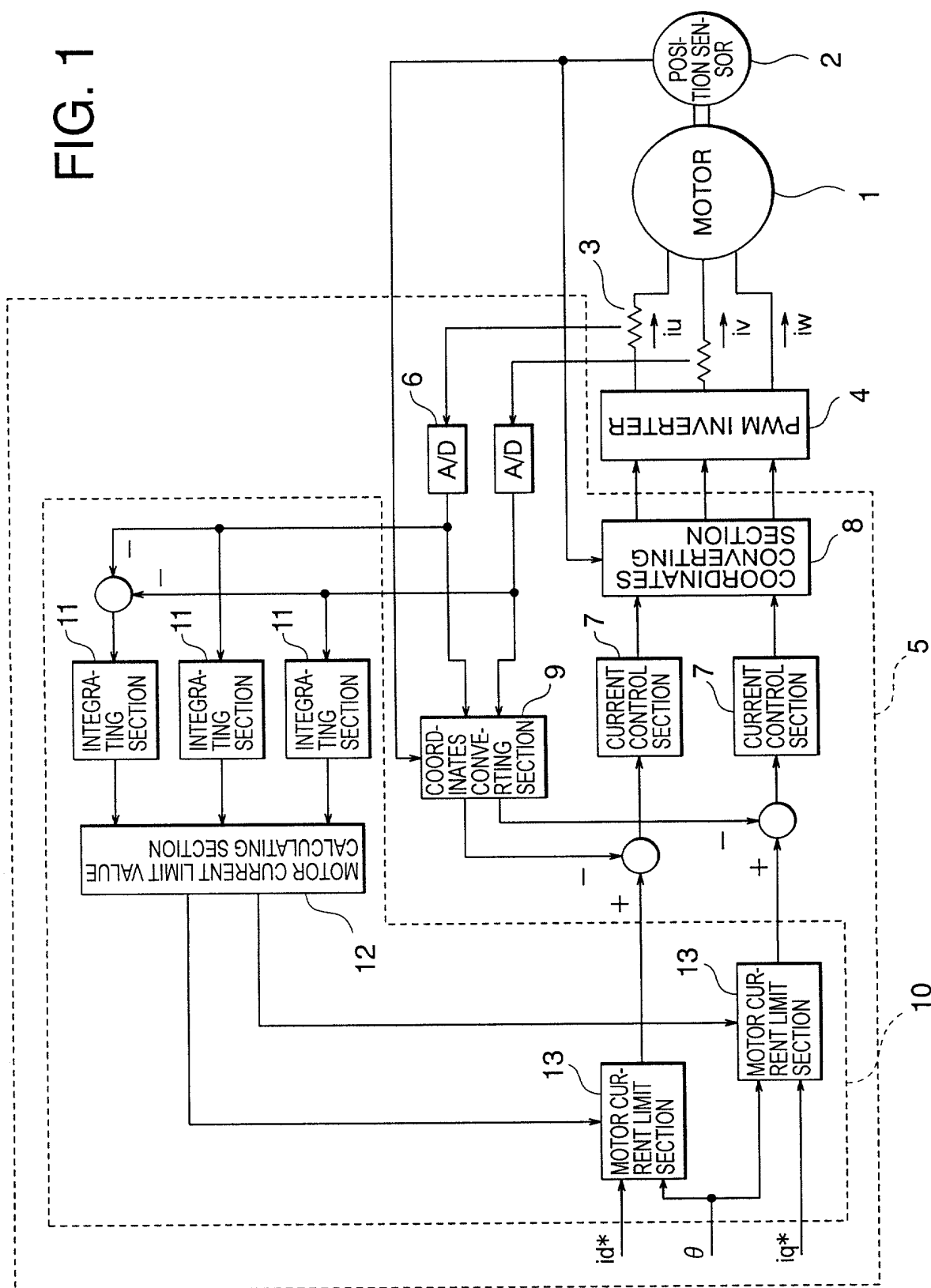


FIG. 2

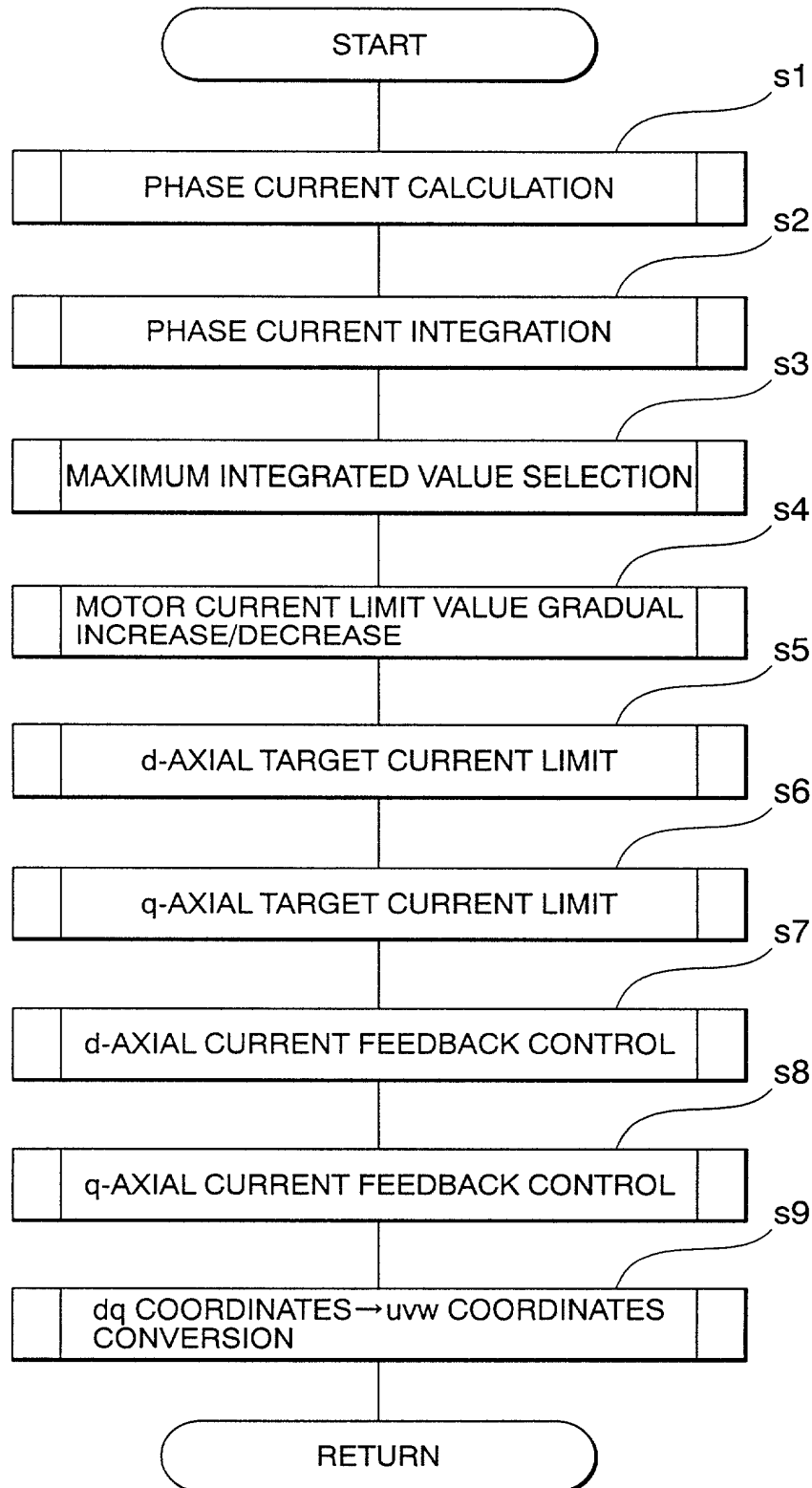


FIG. 3

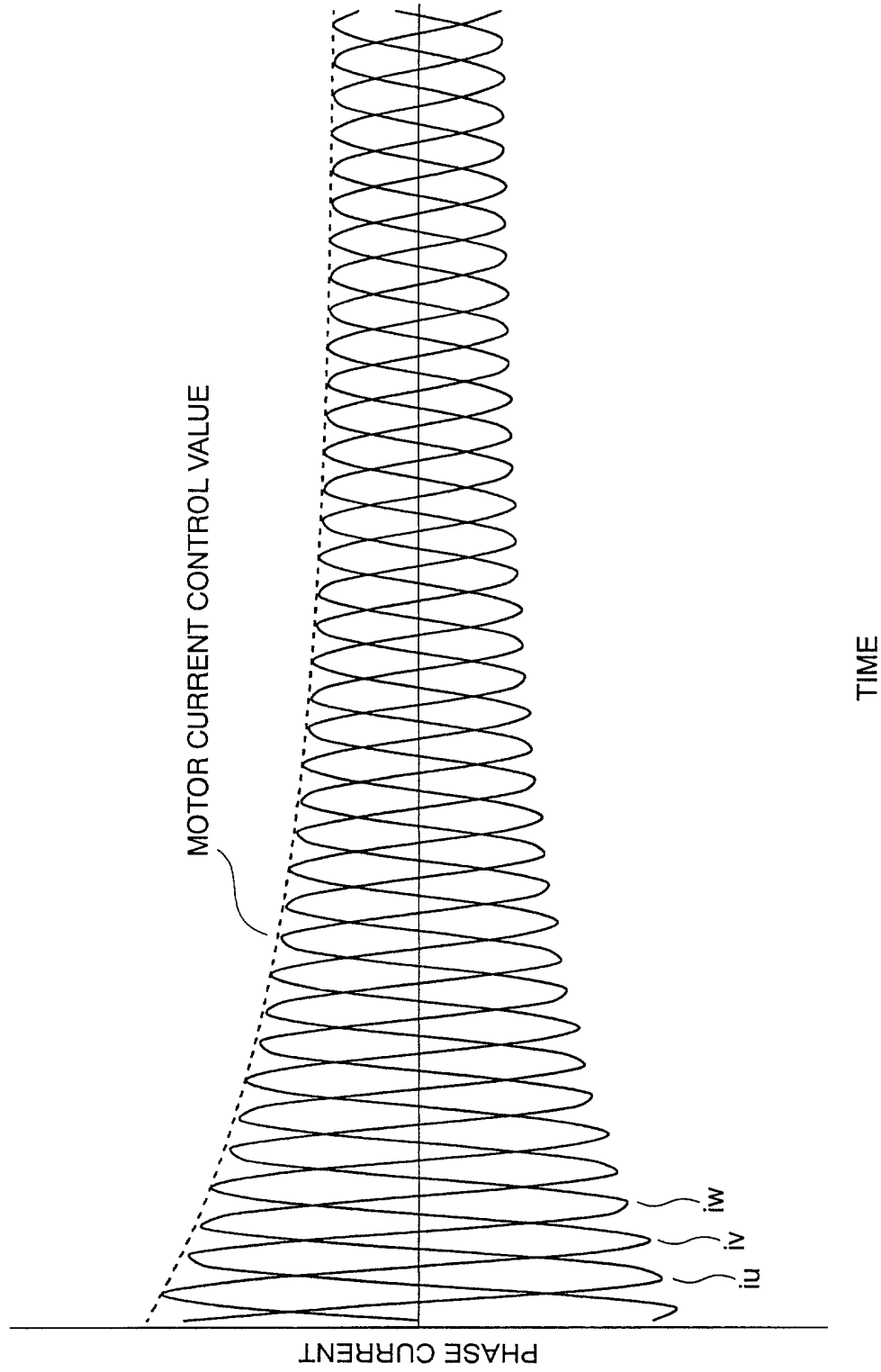


FIG. 4

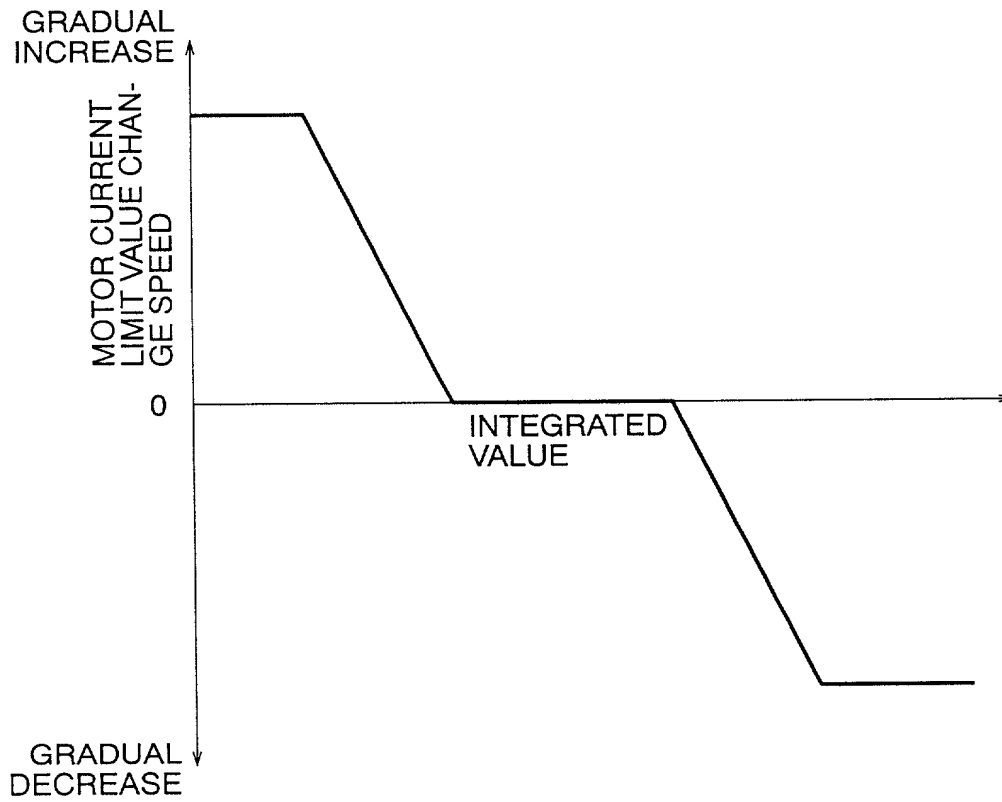
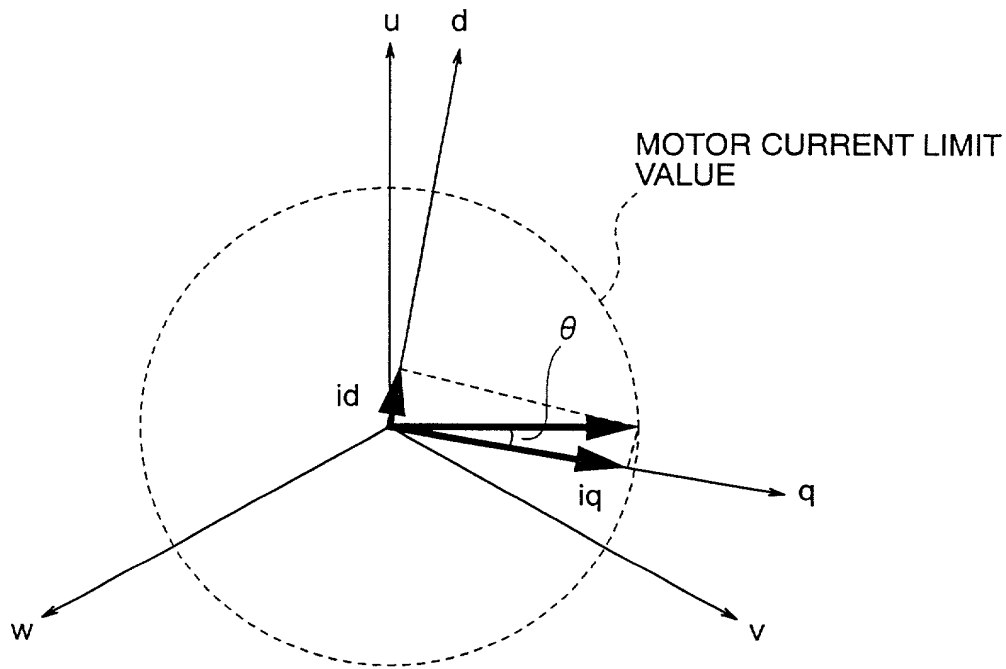


FIG. 5



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FIG. 6A

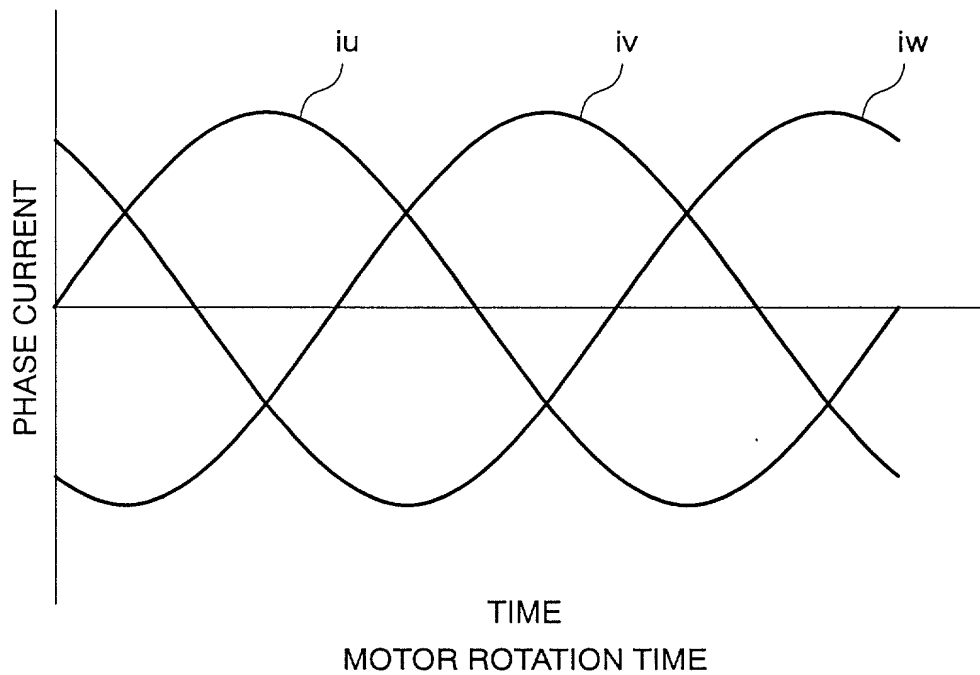


FIG. 6B

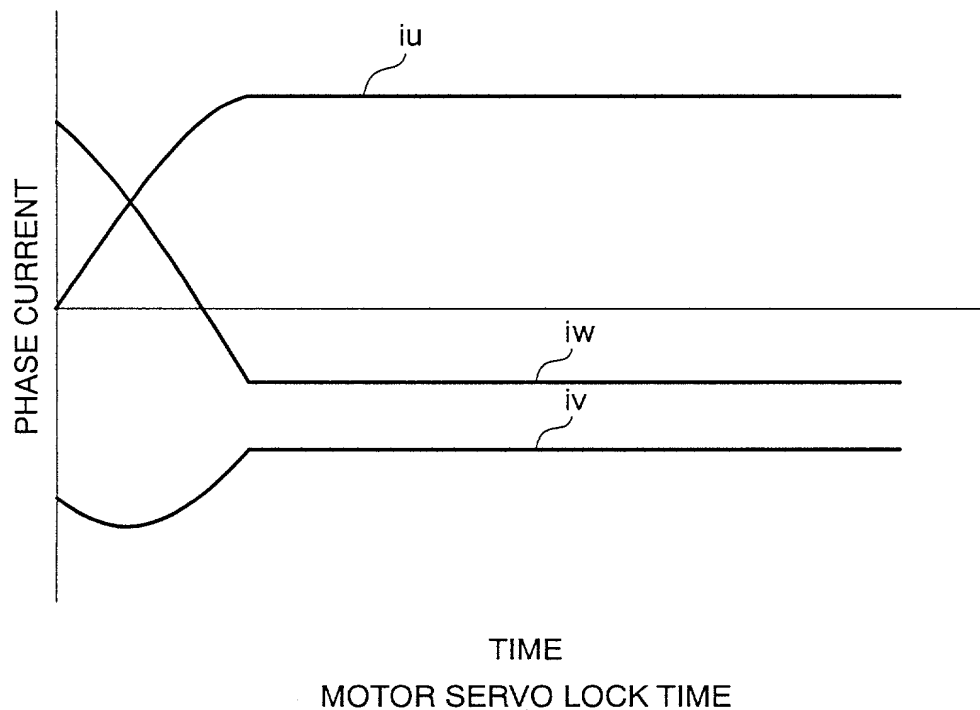


FIG. 7

FIG. 7 is a block diagram of a motor control system. The system includes a MOTOR (1) connected to a POSITION SENSOR (2). The motor is driven by a PWM INVERTER (4) which is controlled by two CURRENT CONTROL SECTIONS (7). The inverter's output is connected to the motor through resistors (3). The system also includes a COORDINATES CONVERTING SECTION (14) which receives reference currents i_d^* and i_q^* and outputs i_d^* and i_q^* . These are compared with feedback signals in a summing junction (13) to produce error signals. These error signals are integrated by three INTEGRATING SECTIONS (11) and then summed at a summing junction (10) to produce a MOTOR CURRENT LIMIT VALUE (12). This value is compared with a reference current in another summing junction (13) to produce a current error signal. This error signal is processed by the two CURRENT CONTROL SECTIONS (7) to generate the PWM INVERTER (4) control signals. The system also includes two A/D converters (6) for feedback signals.

FIG. 8

